

addition of a single molecule of APT542 to APT2058. The compound was assayed in the haemolytic assay (at 1:400 dilution of human serum) and an  $IH_{50}$  value of 0.03 nM was found.

Page 74, paragraph 2, line 5: Please amend as follows:

Example 36: A method for the synthesis and characterization of APT2184 (conjugate of SEQ ID NO: 46 and the base peptide of SEQ ID NO: 5)

d.

Compound APT2184 was generated by treating the parent compound APT2057 with a three-fold molar excess of 10mM tris-2-carboxyethyl phosphine (TCEP: in 50 mM Hepes, pH 4.5) overnight at room temperature. To this mixture is added a solution containing five molar equivalents of MSWP-1 in 100% DMSO for 2 hours at room temperature.

O'to

Page 99, at the end of the specification, please delete the previously submitted Sequence Listing and insert the printed Sequence Listing submitted concurrently herewith.

## IN THE CLAIMS

Please cancel claims 1-26, 28-32, 34, 37, 39, 41-45, 47-48 and 50-52 without prejudice or disclaimer. Please add the claims set forth below.

53. (New) A soluble compound that is directed to an outer membrane of a cell, wherein the soluble compound comprises:



- (1) a soluble polypeptide that inhibits complement; and
- (2) a membrane localization reagent, wherein the membrane localization reagent is soluble and comprises:

- (a) at least one lipophilic binding element comprising aliphatic acyl groups;
- (b) a hydrophilic peptide binding element comprising at least one basic amino acid, wherein the hydrophilic binding element is bound to the lipophilic element; and
- (c) a linker that covalently binds the therapeutic agent to the hydrophilic peptide binding element of the membrane localization reagent to form the soluble compound.
- 54. (New) The soluble compound of claim 53, wherein the hydrophilic peptide binding element comprises lysine residues.
- 55. (New) The soluble compound of claim 53, wherein the hydrophilic peptide binding element comprises arginine residues.



- 56. (New) The soluble compound of claim 53, wherein the soluble peptide that inhibits complement is a soluble CD59 polypeptide or a soluble DAF polypeptide.
- 57. (New) The soluble compound of claim 53, wherein the lipophilic binding element and the a hydrophilic peptide binding element each have a dissociation constant of  $1\mu M$  to 1mM.

- 58. (New) The soluble compound of claim 53, wherein the lipophilic binding element and the a hydrophilic peptide binding element each have a molecular weight of less than 5 kilodaltons.
- 59. (New) The soluble compound of claim 53, wherein the soluble compounds has a dissociation constant affinity of 0.01 to 10 nM for a membrane.
- 60. (New) A pharmaceutical composition that is directed to an outer membrane of a cell, comprising
  - (1) a soluble polypeptide that inhibits complement;
- (2) a membrane localization reagent, wherein the membrane localization reagent is soluble and comprises:
- (a) at least one lipophilic binding element comprising aliphatic acyl groups;
- (b) a hydrophilic peptide binding element comprising at least one basic amino acid, wherein the hydrophilic binding element is bound to the lipophilic element; and
- (c) a linker that covalently binds the therapeutic agent to the hydrophilic peptide binding element of the membrane localization reagent to form the soluble compound; and
  - (3) a pharmaceutically acceptable carrier or excipient.

- 61. (New) The pharmaceutical composition of claim 60, wherein the hydrophilic peptide binding element comprises lysine residues.
- 62. (New) The pharmaceutical composition of claim 60, wherein the hydrophilic peptide binding element comprises arginine residues.
- 63. (New) The pharmaceutical composition of claim 60, wherein the soluble peptide that inhibits complement is a soluble CD59 polypeptide or a soluble DAF polypeptide.
- 64. (New) The pharmaceutical composition of claim 60, wherein the lipophilic binding element and the a hydrophilic peptide binding element each have a dissociation constant of  $1\mu M$  to 1mM.
- 65. (New) The pharmaceutical composition of claim 60, wherein the lipophilic binding element and the a hydrophilic peptide binding element each have a molecular weight of less than 5 kilodaltons.





66. (New) The pharmaceutical composition of claim 60, wherein the soluble compounds has a dissociation constant affinity of 0.01 to 10 nM for a membrane.



Respectfully submitted,

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